

EXHIBIT 6

FILED UNDER SEAL

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10 UNITED STATES DISTRICT COURT
11 NORTHERN DISTRICT OF CALIFORNIA
12 SAN FRANCISCO DIVISION

13 WAYMO LLC

14 Plaintiffs,

15 v.

16 UBER TECHNOLOGIES, INC.;
17 OTTOMOTTO, LLC; OTTO TRUCKING
18 LLC,

19 Defendants.

Case No. 17-cv-00939-JCS

**PLAINTIFF’S OBJECTIONS AND
RESPONSES TO UBER’S THIRD SET OF
INTERROGATORIES (NOS. 13-14)**

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1 Pursuant to Rule 33 of the Federal Rules of Civil Procedure, Plaintiff Waymo LLC
2 (“Waymo”) hereby objects and responds to Defendant Uber Technologies, Inc.’s (“Uber”) Third
3 Set of Interrogatories (Nos. 13-14). These objections and responses are made based on its current
4 understanding and on information reasonably available to Waymo at the present time. Waymo
5 reserves the right to supplement these responses if and when additional information becomes
6 available.

GENERAL OBJECTIONS

7
8 Waymo makes the following General Objections, whether or not separately set forth in
9 response, to each and every instruction, definition, and question posed in the interrogatories. By
10 responding to any of the interrogatories or failing to specifically refer to or specify any particular
11 General Objection in response to a particular interrogatory, Waymo does not waive any of these
12 General Objections, or admit or concede the appropriateness of any purported interrogatory or any
13 assumptions contained therein.

14 1. Waymo objects to each interrogatory, and to the Definitions and Instructions, to the
15 extent that they purport to impose any obligations upon Waymo beyond the Federal Rules of Civil
16 Procedure, the Local Rules of the United States District Court for the Northern District of
17 California, and the Supplemental Order to Order Setting Initial Case Management Conference in
18 Civil Cases Before Judge William Alsup.

19 2. Waymo objects to the definitions of “Waymo,” “Plaintiff,” “You,” and “Your” on
20 the grounds the definitions are overbroad, unduly burdensome, and vague, including, but not
21 limited to, the extent that they include Alphabet Inc. or any Waymo subsidiary, subcontractor,
22 partnership, joint venture, or other business cooperation involving Waymo LLC, Google Inc.,
23 and/or Alphabet Inc., the present and former officers, directors, employees, agents,
24 representatives, accountants, financial advisors, consultants, and attorneys or other persons owned
25 or controlled by Waymo LLC, Google Inc., and/or Alphabet Inc., regardless of their affiliation or
26 employment.

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1 3. Waymo objects to each interrogatory to the extent that they seek information
2 protected by the attorney-client privilege or the work product doctrine or that is otherwise
3 privileged or protected from discovery.

4 4. Waymo objects to each interrogatory to the extent that they seek information that is
5 not relevant to a claim or defense of any party or to the subject matter of this action and is not
6 proportional to the needs of the case, considering the importance of the issues at stake in the
7 action, the amount in controversy, the parties’ relative access to relevant information, the parties’
8 resources, the importance of the discovery in resolving the issues, and whether the burden or
9 expense of the proposed discovery outweighs its likely benefit.

10 5. Waymo objects to each interrogatory to the extent that they are compound,
11 complex, and contain multiple subparts.

12 6. Waymo objects to each interrogatory to the extent that they are overbroad, unduly
13 burdensome, vague, and/or ambiguous.

14 7. Waymo objects to each interrogatory to the extent that they seek information that
15 does not already exist, or that is not in Waymo’s possession, custody, or control.

16 8. Waymo objects to each interrogatory to the extent that they require Waymo to
17 provide information beyond what is available to Waymo at present from a reasonable search of its
18 own files likely to contain relevant or responsive documents and from a reasonable inquiry of its
19 present employees.

20 9. Waymo objects to each interrogatory to the extent that they seek confidential or
21 proprietary information, including without limitation, confidential business information,
22 proprietary and/or competitively sensitive information, or trade secrets. Subject to its other
23 General Objections, and to any specific objections set forth below, Waymo will only provide
24 relevant information in a manner consistent with the Protective Order entered by the Court in this
25 matter.

26 10. Waymo objects to each interrogatory to the extent that they seek information that
27 Waymo is not permitted to disclose pursuant to confidentiality obligations or agreements with
28 third parties.

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1 11. Waymo objects to each interrogatory to the extent that they are unlimited in time or
2 otherwise not limited to a time frame relevant to this litigation and to the patents-in-suit, and
3 therefore burdensome, oppressive, overly broad, and not proportional to the needs of the case.

4 12. Waymo objects to each and every interrogatory to the extent that they call for a
5 legal conclusion.

6 13. Waymo objects to each and every interrogatory to the extent that they call for
7 responses that are the subject of expert testimony. Waymo will provide its expert reports pursuant
8 to deadlines to be set by the Court for the exchange of such reports and will supplement or amend
9 those reports as appropriate and as permitted by the Court.

10 14. Waymo objects to each and every interrogatory to the extent that they call for
11 information that is publicly available and therefore as accessible to Defendants as to Waymo.

12 15. Waymo objects to these interrogatories to the extent that they are premature.
13 Discovery is ongoing and Waymo has not yet completed its investigation of the matters at issue in
14 this action. Waymo reserves the right to modify, supplement, change or amend its responses once
15 Waymo has conducted the necessary discovery and investigation.

16 16. Waymo objects to Instruction No. 5 as overbroad, unduly burdensome, vague, and
17 ambiguous to the extent that it refers to “Provision 1(d) of the Default Standard for Discovery in
18 this judicial district.”

19 17. Waymo responds to each and every interrogatory based on its knowledge,
20 information and belief based on its investigation as of the date of the response; however, Waymo’s
21 investigation into the issues of this action remains ongoing. Waymo reserves the right to
22 supplement or amend its responses without prejudice pursuant to Rule 26(e).

23 18. Waymo’s responses are not to be construed as an admission that any of the
24 requested information exists, that any information is admissible, relevant or proportional to the
25 needs of the case, or that any contention or assumption contained in the interrogatories, whether
26 implicit or explicit, is correct.

27 19. Waymo incorporates by reference its General Objections in each of the specific
28 responses set forth below.

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Waymo expressly incorporates the above objections as though set forth fully in response to each of the following individual interrogatories, and, to the extent that they are not raised in the particular response, Waymo does not waive those objections.

INTERROGATORY NO. 13:

For each cause of action in the Waymo Complaint, describe in detail the complete basis for any damages You contend You have suffered or will suffer due to the alleged conduct of Defendants, including a specific explanation of each damages theory or methodology by which You contend the amount of damages should be calculated (e.g., compensatory damages, unjust enrichment, reasonable royalty, punitive or exemplary damages, restitution or disgorgement, or any other measure of damages); the specific calculations and inputs You contend should be used under each such theory or methodology; and the identification of all facts, documents (by bates number), testimony and other information that You contend support Your damages claims.

RESPONSE TO INTERROGATORY NO. 13:

Waymo incorporates by reference its General Objections. Waymo further objects to this interrogatory on the grounds that it is overbroad, unduly burdensome, and oppressive, including to the extent that it asks Waymo to “describe in detail the complete basis” and provide an “identification of all facts, documents (by bates number), testimony and other information.” Waymo further objects to this interrogatory to the extent it is compound, complex, and contains multiple subparts. Waymo further objects to this interrogatory as premature to the extent it calls for information that is subject to expert testimony. Waymo will provide expert testimony in accordance with the Court’s procedural schedule.

Subject to and without waiving the foregoing General and Specific Objections, Waymo responds as follows:

Waymo’s technical expert is continuing to assess Defendants’ use of Waymo’s trade secrets and patented technology; such assessments will ultimately inform the damages analysis in

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1 this case. Moreover, Defendants have not yet responded to Waymo’s damages-related discovery
 2 requests. Therefore, Waymo’s expert has not concluded his analysis and is not expected to do so
 3 until the time that expert reports are due on August 24, 2017.

4 Discovery in this case is ongoing, and Waymo is still waiting for substantive responses to
 5 its Fourth Set of Requests for Production (Nos. 266-297) and First Set of Common and Specific
 6 Interrogatories, all of which relate to damages. Specifically, Waymo expects Defendants’
 7 responses to the following document requests and interrogatories to inform its response to this
 8 interrogatory, and Waymo expects to supplement its response to this interrogatory when it
 9 receives Defendants’ document production and interrogatory responses:

- 10 • DOCUMENTS sufficient to show UBER’s market capitalization and internal
 11 valuation of itself on a quarterly basis, from the year prior to the year in which
 12 UBER first contemplated developing autonomous vehicles through the present.
- 13 • DOCUMENTS sufficient to show the impact of developing autonomous vehicles
 14 on Uber’s internal valuation of itself from the year prior to the year in which UBER
 15 first contemplated developing autonomous vehicles through the present.
- 16 • DOCUMENTS describing UBER’s development of autonomous vehicles as
 17 necessary to the continued viability of UBER or to the continued viability of any
 18 aspect of UBER’s business, INCLUDING but not limited to characterizations of a
 19 competitor’s development or deployment of autonomous vehicles as an existential
 20 threat to UBER.
- 21 • DOCUMENTS sufficient to show each iteration of DEFENDANTS’ plan to launch
 22 any autonomous vehicles in any geographic region from the time DEFENDANTS
 23 first contemplated developing or deploying autonomous vehicles to the present.
- 24 • DOCUMENTS sufficient to show DEFENDANTS’ estimates of the size of the
 25 ridesharing market and DEFENDANTS’ share of that market in the United States
 26 for each of the last six years on a quarterly basis. To the extent DEFENDANTS
 27 break out such estimates by geography (region, city, etc.), those estimates should
 28 also be provided.
- DOCUMENTS sufficient to show DEFENDANTS’ forecasts of the size of the
 ride-sharing market, the percentage of the ride-sharing market that will be serviced
 by autonomous vehicles, and DEFENDANTS’ share of that market in the United
 States (by autonomous vehicles and vehicles driven by contractors) for any period
 of time forecasted by UBER, on a quarterly basis. To the extent DEFENDANTS
 break out such estimates by geography (country, region, city, etc.), those estimates
 should also be provided. To the extent DEFENDANTS create different forecasts

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1 based on different assumptions, documents REGARDING each forecast – with
 2 documents sufficient to show the assumptions for each – should be provided.

- 3 • DOCUMENTS sufficient to show DEFENDANTS’ forecasts REGARDING the
 4 number of DEFENDANTS’ ride-sharing vehicles in the United States (by
 5 autonomous vehicles and vehicles driven by contractors), for any period of time
 6 forecasted by UBER —broken out by on a quarterly basis. To the extent
 7 DEFENDANTS break out such estimates by geography (country, region, city, etc.),
 8 those estimates should also be provided. To the extent DEFENDANTS create
 9 different forecasts based on different assumptions, documents REGARDING each
 10 forecast – with documents sufficient to show the assumptions for each – should be
 11 provided.
- 12 • DOCUMENTS sufficient to show DEFENDANTS’ business plans, strategic plans,
 13 operating plans, marketing plans, financial plans, sales plans, and investment plans
 14 for its ridesharing business, INCLUDING projections for revenue generation and
 15 profitability.
- 16 • DOCUMENTS sufficient to show DEFENDANTS’ business plans, strategic plans,
 17 operating plans, marketing plans, financial plans, sales plans, and investment plans
 18 for its autonomous vehicle program, INCLUDING projections for revenue
 19 generation and profitability of the autonomous vehicle program.
- 20 • DOCUMENTS sufficient to show DEFENDANTS’ analysis of any barriers to
 21 entry in the ride-sharing market and the status of any attempts by DEFENDANTS
 22 to enforce such barriers against competitors INCLUDING WAYMO, INCLUDING
 23 investments and infrastructure needed.
- 24 • DOCUMENTS REGARDING DEFENDANTS’ discussion of WAYMO or its
 25 business, INCLUDING DEFENDANTS’ analysis of WAYMO’s impact or
 26 potential impact on the ridesharing market or on UBER.
- 27 • DOCUMENTS sufficient to identify the date that UBER first considered deploying
 28 autonomous vehicles.
- DOCUMENTS sufficient to identify the date that UBER first considered
 developing its own autonomous vehicles.
- DOCUMENTS sufficient to identify the date that UBER first considered
 developing its own in-house LiDAR.
- DOCUMENTS REGARDING the importance of a first-mover advantage in
 commercializing autonomous vehicles, INCLUDING any estimates of the market
 shares of other entrants that are not first to market.
- DOCUMENTS REGARDING the importance of LiDAR, INCLUDING the
 importance of low-cost LiDAR, to DEFENDANTS’ ability to compete.

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- 1 • DOCUMENTS REGARDING the relative value of safety (vis-à-vis, for example,
2 cost and timing of entry into relevant markets) in the commercialization of
3 autonomous vehicles.
- 4 • DOCUMENTS sufficient to show DEFENDANTS’ analysis of WAYMO’s
5 technological lead REGARDING autonomous vehicle technology (INCLUDING
6 DEFENDANTS’ estimates of the time, personnel, and investment needed to close
7 the gap between DEFENDANTS and WAYMO), and documents sufficient to show
8 how DEFENDANTS’ analysis or estimates have changed over time.
- 9 • DOCUMENTS sufficient to show DEFENDANTS’ analysis of how WAYMO’s
10 technological lead over DEFENDANTS REGARDING autonomous vehicle
11 technology (INCLUDING DEFENDANTS’ estimates of the time, personnel, and
12 investment needed to close the gap between DEFENDANTS and WAYMO)
13 changed after Uber’s acquisition of OTTOMOTTO and OTTO TRUCKING.
- 14 • DOCUMENTS sufficient to show DEFENDANTS’ analysis of WAYMO’s
15 technological lead REGARDING LiDAR technology (INCLUDING
16 DEFENDANTS’ estimates of the time, personnel, and investment needed to close
17 the gap between DEFENDANTS and WAYMO), and documents sufficient to show
18 how DEFENDANTS’ analysis or estimates have changed over time.
- 19 • DOCUMENTS sufficient to show DEFENDANTS’ analysis of how WAYMO’s
20 technological lead over DEFENDANTS REGARDING LiDAR technology
21 (INCLUDING DEFENDANTS’ estimates of the time, personnel, and investment
22 needed to close the gap between DEFENDANTS and WAYMO) changed after
23 UBER’s acquisition of OTTOMOTTO and OTTO TRUCKING.
- 24 • DOCUMENTS sufficient to show DEFENDANTS’ comparisons of the cost and
25 profitability of a human-driven versus an autonomous vehicle in a ride-sharing
26 fleet.
- 27 • DOCUMENTS sufficient to show the historical and current cost of
28 DEFENDANTS’ autonomous vehicles, broken down by component, and dating
back to the inception of DEFENDANTS’ autonomous vehicle program. As noted
in the Instructions above, to the extent DEFENDANTS can provide separate
information for each Defendant, DEFENDANTS should do so.
- DOCUMENTS sufficient to show DEFENDANTS’ total financial investment
including but not limited to employee time, purchase of capital equipment, and
outside consultants, by quarter, into its efforts to develop in-house LiDAR. As
noted in the Instructions above, to the extent DEFENDANTS can provide separate
information for each Defendant, DEFENDANTS should do so.
- DOCUMENTS sufficient to show DEFENDANTS’ investment, in terms of time
including but not limited to engineers, software developers, managers, and
executives (broken out by each category of employee), into its efforts to develop in-
house LiDAR. As noted in the Instructions above, to the extent DEFENDANTS

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1 can provide separate information for each Defendant, DEFENDANTS should do
2 so.

- 3 • Patent licenses or agreements relating to LiDAR.
- 4 • DOCUMENTS REGARDING non-infringing alternatives to the patents-in-suit,
5 and the estimated cost (INCLUDING both money and time) of implementing the
6 same.
- 7 • DOCUMENTS sufficient to show the impact to DEFENDANTS of having to
8 redesign Fuji to avoid using the trade secrets identified in response to UBER’s
9 interrogatory No. 1.
- 10 • DOCUMENTS sufficient to show any valuation (whether conducted by UBER or
11 by a third party) of the assets and technology acquired in the acquisition of Otto by
12 Uber, INCLUDING valuations performed for the purpose of purchase price
13 accounting or any other purpose.
- 14 • DOCUMENTS sufficient to show any DEFENDANTS’ projected revenue, gross
15 margin, and operating profit for any division including autonomous vehicles.
- 16 • DOCUMENTS sufficient to show any the financials, INCLUDING profit and loss
17 statements and balance sheet, for OTTOMOTTO, OTTO TRUCKING, and any
18 division of UBER including autonomous vehicles.
- 19 • DOCUMENTS sufficient to show DEFENDANTS’ approved requests for capital
20 expenditure authorizations related to its autonomous vehicle program,
21 INCLUDING R&D expenditures, technology/equipment acquisitions, and
22 marketing expenditures.
- 23 • Describe in detail the impact, including financial impact, to DEFENDANTS of
24 having to redesign Fuji to avoid using the trade secrets identified in response to
25 UBER’s Interrogatory No. 1.
- 26 • To the extent DEFENDANTS contend they will be irreparably harmed by a
27 permanent injunction prohibiting the use of WAYMO’s trade secrets in this case,
28 describe in detail the factual and legal bases for that contention.
- Describe in detail DEFENDANTS’ investment in developing in-house LiDAR.
This should include DEFENDANTS’ financial investment, as well as
DEFENDANTS’ investment in terms of time and personnel.
- Describe in detail [OTTOMOTTO and OTTO TRUCKING’s] efforts to place a
value on OTTOMOTTO and/or OTTO TRUCKING or their respective assets and
technology as part of UBER’S acquisition of OTTOMOTTO and/or OTTO
TRUCKING, either prior to or following the acquisition.

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- Describe in detail UBER’s efforts to place a value on OTTOMOTTO and/or OTTO TRUCKING or their respective assets and technology as part of the acquisition, either prior to or following the acquisition, including but not limited to the efforts described by Nina Qi during her deposition at Rough Tr. 192:4-199:15.
- IDENTIFY the date that UBER first considered developing its own in-house LiDAR and the date UBER began developing its own in-house LiDAR (to the extent it differs from the date UBER began considering it), and describe in detail UBER’s reasons for wanting to develop its own in-house LiDAR.

Damages for Violations of Defense of Trade Secrets Act and California Uniform Trade Secret Act***Unjust Enrichment Damages***

Uber, Ottomotto, and Otto Trucking have been unjustly enriched due to their misappropriation of Waymo’s trade secrets. There are several measures that can be used to quantify the unjust enrichment to Defendants. One measure of the unjust enrichment to Defendants is the value that was paid (or will be paid) by Uber for Ottomotto and Otto Trucking (collectively, “Otto”). When Uber began negotiating with Mr. Levandowski, Otto was a company that did not exist, and did not have any products. (Qi Tr. 146:8-18.) And at that time, Uber [REDACTED] (Bares Tr. at 179:14-18.) John Bares, Operations Director in Uber’s Advanced Technology Group, was personally responsible for negotiating aspects of Uber’s acquisition of Otto on Uber’s behalf, including a series of technical milestones regarding LiDAR. He admitted that [REDACTED]

[REDACTED] (*Id.* 179:19-180:12.) Defendants do not dispute that Mr. Levandowski had access to Waymo’s files at this time—as a result of both his ongoing employment at Waymo, and his illicit downloads.

Uber and Otto began negotiating the term sheet for the acquisition of Otto in January and February 2016, with the final term sheet executed on February 22, 2016. (UBER00017518-578; UBER00069043-064.) For at least some of this period, Mr. Levandowski was still an employee of Google. Because Otto had no products when Uber and Otto began negotiating (Qi Tr. 146:8-18), the only things of value to be acquired by Uber were likely (1) the engineers that Uber acquired;

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1 and (2) Waymo’s technology. Therefore, the misappropriated trade secrets represented a
 2 significant portion of the assets acquired by Uber, as well as the talents of the employees that
 3 would be engaged in connection with the acquisition.

4 Uber and Otto entered into the formal Agreement and Plan of Merger on April 11, 2016.
 5 (UBER00016453-16523.) Prior to entering into the agreement, Uber’s Board of Directors
 6 approved the acquisition. Discovery regarding Uber’s internal valuation of Otto (including
 7 information regarding the assumptions underlying Uber’s internal valuation of Otto) will further
 8 inform Waymo’s unjust enrichment analysis. However, Nina Qi testified that [REDACTED]
 9 [REDACTED] (Qi Tr. at 100-103) Although
 10 Uber’s payment to Otto was conditioned on [REDACTED]
 11 [REDACTED] this value is a reasonable measure of the present value of the transaction given that it
 12 was the value presented to Uber’s Board of Directors in the Board’s consideration and approval of
 13 the acquisition.

14 Another measure of the unjust enrichment to Defendants is the present value of the
 15 additional cash flows that Defendants will earn as a result of Uber’s accelerated development of
 16 self-driving car technology. Uber expected that acquiring Otto would accelerate the development
 17 of its LiDAR technology. For example, when considering the acquisition, Uber estimated that
 18 acquiring Otto could [REDACTED]

19 (UBER00069030-033 at ‘033.) Even under its [REDACTED] Uber estimated [REDACTED]
 20 [REDACTED]
 21 [REDACTED]

22 (UBER00069030-033 at ‘033.) In addition to the increased profits, Uber recognized Waymo was
 23 a threat to its entire existence, potentially placing its entire business at risk—something that,
 24 according to public reports, is worth approximately \$70 billion. (See
 25 [https://techcrunch.com/2017/06/21/kalanick-is-out-but-ubers-vcs-royally-screwed-up-too-say-](https://techcrunch.com/2017/06/21/kalanick-is-out-but-ubers-vcs-royally-screwed-up-too-say-industry-watchers/)
 26 [industry-watchers/](https://techcrunch.com/2017/06/21/kalanick-is-out-but-ubers-vcs-royally-screwed-up-too-say-industry-watchers/)). For example, Uber’s then-CEO was quoted as follows: “The minute it was
 27 clear to us that our friends in Mountain View were going to be getting in the ride sharing space,
 28 we needed to make sure there is an alternative [self-driving car]. Because if there is not, we’re not

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1 going to have any business.” He also described developing an autonomous vehicle as “basically
2 existential for us.” (UBER00006042-047 at ‘043; UBER00006035-041 at ‘037; UBER00064472-
3 473; LEV_001940-051 at ‘940.) In messaging notes related to the acquisition, Uber’s then-CEO
4 noted “ [REDACTED]
5 [REDACTED]” (UBER00064468-469 at ‘468.) Similarly, Jeff Holden, Uber’s Chief Product Officer,
6 wrote: “ [REDACTED]

7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 (UBER00070108-110 at ‘108.)

15 Another measure of unjust enrichment to Defendants is the expected cost savings to
16 Defendants from using Waymo’s trade secrets in Uber’s LiDAR systems. Waymo has obtained
17 significant cost savings by developing custom, in-house LiDAR systems using its trade secrets.
18 Waymo’s custom, in-house solution is much cheaper than options offered by third party vendors;
19 as explained in more detail in Waymo’s response to Interrogatory No. 6, a mid-range LiDAR from
20 Velodyne costs approximately \$70,000. Uber has [REDACTED]
21 [REDACTED] (UBER00086529.) By contrast, the materials needed for
22 Waymo’s own mid-range GBr3 LiDAR system, which uses the trade secrets at issue in this case,
23 cost [REDACTED] (See Waymo’s Response to Interrogatory No. 6 and all supplements
24 thereto.)

25 Due to the misappropriation of Waymo’s trade secrets, Defendants will likely benefit from
26 many years of future cost savings due to employing Waymo’s trade secrets in Uber’s LiDAR
27 systems. While considering the acquisition of Otto, Uber [REDACTED]
28 [REDACTED]

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1 [REDACTED] (UBER00068983.) [REDACTED]

2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]

7 Another measure of unjust enrichment to Defendants is the expected cost savings due to
8 reduced development expenses from using Waymo’s trade secrets in Uber’s LiDAR systems.
9 While considering the acquisition of Otto, Uber recognized [REDACTED]
10 [REDACTED]
11 (UBER00068983) An internal Uber email estimates that Uber’s acquisition of Otto saved Uber

12 [REDACTED]
13 [REDACTED]
14 [REDACTED] (UBER00060147-156 at ‘147.) One way to measure the costs that Defendants saved
15 through their misappropriation of Waymo’s trade secrets is by looking at the costs that Waymo
16 incurred to develop those trade secrets. As discussed in Waymo’s response to interrogatory 6,
17 Waymo has incurred up to [REDACTED] to develop the trade secrets. (See Waymo’s 7/13
18 Supplemental Response to Interrogatory No. 6 and all supplements thereto.)

19 Waymo anticipates that Defendants will argue that the measures of unjust enrichment
20 discussed above are measures of value for the entirety of the company (Otto) acquired by Uber.
21 Waymo expects to rebut any evidence presented by Defendants that a portion of any value can be
22 attributed to any contributions other than Waymo’s trade secrets. Nonetheless, Waymo addresses
23 apportionment below.

24 Otto had no products when Uber and Otto began negotiating. (Qi Tr. 146:8-18.) And
25 Otto’s [REDACTED]
26 [REDACTED] (UBER00060164 and UBER00060165). Therefore, the only things of value to be
27 acquired by Uber were likely (1) the engineers that Uber acquired; and (2) Waymo’s technology.
28 Waymo is still conducting discovery regarding what assets (if any) Otto had when Uber decided to

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1 acquire it. To the extent Otto had any working products or technology by the time Uber agreed to
2 acquire it, Waymo’s unjust enrichment analysis would account for that by deducting the value of
3 Otto’s then-existing technology. However, as previously discussed, Waymo expects the large
4 majority of the measures of value discussed above to be attributable to the value of the stolen
5 information and engineers that Uber acquired in the transaction.

6 With respect to the value of the engineers Uber acquired from Otto, talented engineers in
7 the autonomous vehicle field are few and far between. In particular, some of the engineers who
8 left Waymo to join Otto, and who were eventually acquired by Uber, had very specialized skill
9 sets, including Don Burnette, Claire Delaunay, Gaetan Pennecot and Mr. Levandowski himself.
10 These engineers would likely be worth more than an average engineer, and more than even an
11 average autonomous vehicle engineer. Waymo is still obtaining discovery regarding Uber’s
12 valuation of the engineers that it acquired, but one public estimate of the value of engineers in the
13 autonomous vehicle industry is \$10 million per engineer.
14 (<https://www.recode.net/2016/9/17/12943214/sebastian-thrun-self-driving-talent-pool>).

15 With respect to development expenses, it is possible that Defendants would not have had
16 to incur all of the development expenses Waymo incurred if Defendants had developed the trade
17 secrets themselves (rather than misappropriating them from Waymo). Although Waymo is still
18 seeking discovery on how long Uber spent in its autonomous vehicle development efforts before
19 acquiring Otto, Waymo understands that Uber had been developing autonomous vehicle
20 technology prior to its discussions with Otto. Uber may argue that in calculating Uber’s unjust
21 enrichment based on Waymo’s development expenses, it may be appropriate to include only a
22 portion of Waymo’s total development expenses. To date, Defendants have not produced
23 evidence regarding their LiDAR development efforts necessary to conduct such an apportionment.
24 However, as discussed above, Uber believed that it could save development expenses by acquiring
25 Otto. Specifically, Uber estimated [REDACTED]

26 [REDACTED]
27 Thus, one estimate of the potential savings as a result of Defendants obtaining Waymo’s
28 technology is the [REDACTED] that Uber estimated it would

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1 save in developing autonomous vehicle technology, which can be expressed as a percentage of
2 Uber’s total development expenses. Another measure of the potential savings as a result of
3 Defendants obtaining Waymo’s technology is the difference between the amount of money
4 Waymo has spent in developing autonomous vehicle technology and the amount of money that
5 Defendants have spent. Another measure of the potential savings can be calculated based on the
6 proportion of development expenses that Waymo has spent in developing LiDAR technology in
7 relation to the other technologies in autonomous vehicles. Waymo reserves its right to
8 supplement this response if and when Defendants produce the information necessary to conduct an
9 apportionment regarding development expenses.

10 In addition, if Uber is able to deploy autonomous vehicles in its fleet, its operational costs
11 for its entire ridesharing business would likely drop substantially, in part because it would not
12 have to share any revenue with its drivers.

13 Waymo is under a Court order to narrow its list of asserted trade secrets to less than ten by
14 August 1. After Waymo completes this narrowing, Waymo will consider how to apportion the
15 value of the trade secrets that Mr. Levandowski and Uber misappropriated to account for the trade
16 secrets that it will bring to trial in this case. However, Waymo suspects that a substantial portion
17 of the unjust enrichment would be attributable to the most valuable trade secrets. Since Uber and
18 Waymo are racing to commercialize autonomous vehicles, [REDACTED]
19 [REDACTED] (UBER00070108-110 at ‘108.). Thus, Waymo presumes that Defendants
20 made use of the most important and most valuable trade secrets first.

Reasonable Royalty Damages

22 If the Court were to determine that damages based on the unjust enrichment caused by
23 Defendants’ misappropriation of the trade secrets is not provable, the Court “may order payment
24 of a reasonable royalty for no longer than the period of time the use could have been prohibited”
25 pursuant to the provisions of the California Uniform Trade Secrets Act. Cal. Civ. P. § 3426.3(b).
26 A reasonable royalty is also available under the Defend Against Trade Secrets Act. 18 U.S.C. §
27 1836(b)(3)(A)(iii) (“in lieu of damages measured by any other methods, the damages caused by
28

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1 the misappropriation measured by imposition of liability for a reasonable royalty for the
2 misappropriator’s unauthorized disclosure or use of the trade secret”).

3 Waymo’s damages expert will analyze and compute the amount of reasonable royalty
4 damages payable to Waymo by Defendants due to the misappropriation of the trade secrets based
5 on the documents and information produced by Waymo, Defendants and third parties during
6 discovery, as well as independent research conducted by Waymo’s damages expert. Specifically,
7 Waymo’s expert will, among other things, opine as to the appropriate reasonable royalty, either in
8 the form of a lump sum payment or a running royalty rate, or a combination of both.

9 As discussed above, Defendants have not yet responded to Waymo’s damages-related
10 discovery requests. Therefore, Waymo’s expert has not concluded his analysis and is not expected
11 to do so until the time that expert reports are due on August 24, 2017.

12 At present, Waymo anticipates that its expert’s computations of a reasonable royalty
13 adequate to compensate for Defendants’ infringement will involve an analytical approach and/or a
14 hypothetical negotiation approach. An analytical approach is used to determine a royalty that
15 leaves the infringer with a “normal” rate of return for the use of its products embodying the trade
16 secrets or to calculate a royalty based on the increased profitability due to the use of the trade
17 secrets in Defendants’ products. In other words, an analytical approach will determine, or isolate,
18 the financial benefit or value that Defendants obtained through their use of the misappropriated
19 trade secrets.

20 Waymo anticipates that its expert’s determination of reasonable royalty damages under an
21 analytical approach or a hypothetical negotiation approach will be based on, among other things,
22 analysis of sales and profit projections, analyst forecasts, profitability information and other
23 documents and records produced by Waymo, Defendants, and third parties. In addition to the
24 foregoing, Waymo’s expert may utilize documents and materials referred to and recognized as
25 relevant to the determination of the cost savings achieved by the Defendants due to their
26 misappropriation. In addition to the foregoing, Waymo’s expert may utilize documents and
27 materials referred to and recognized as relevant to the determination of a reasonable royalty or
28 other damages computations in cases such as *Georgia-Pacific*, among others.

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1 At present, Waymo’s understanding of the primary considerations that Waymo’s expert
2 will analyze with respect to the hypothetical negotiation approach are summarized below.

3 *Impact on Waymo’s future expected profits* - Waymo expects that its future success is
4 critically dependent on its technological lead in autonomous vehicles. (WAYMO-UBER-
5 00004108-131 at ‘109, ‘111; Chu Tr. 12:3-7, 45:19-24) Defendants’ misappropriation of
6 Waymo’s trade secrets shortens the technological lead that Waymo has in autonomous vehicles.
7 For example, when considering the acquisition of Ottomotto and Otto Trucking, Uber estimated

8 [REDACTED]
9 (UBER00069030-033 at ‘033.) Given the importance of Waymo’s technological lead, a
10 diminished technology lead would likely have a significant impact on its ability to earn profits.

11 *Waymo’s policy to protect and maintain its trade secrets* – Waymo has sought to protect its
12 trade secrets and has not disclosed the trade secrets to third parties, and it has not licensed its trade
13 secrets. Waymo takes robust measures to protect its LiDAR trade secrets. As a condition of
14 employment, Waymo requires all employees to enter into written agreements to maintain the
15 confidentiality of proprietary and trade secret information, and not to misuse such information.
16 Waymo also enforces an employee code of conduct that explains employees’ strict obligations to
17 maintain the secrecy of confidential information, and requires employee training in security
18 procedures. Droz Decl. ¶ 30.

19 Waymo also takes reasonable measures to mark confidential and proprietary information,
20 such as documents and other materials, with visible legends designating them as such when
21 sharing them outside of Waymo, subject to NDAs or other confidentiality agreements.
22 Disclosures to vendors are limited to the subject matter necessary for the vendor’s engagement and
23 do not reveal the entirety of a given LiDAR system or design. Waymo employs reasonable efforts
24 to secure physical facilities by restricting access and employing locks, cameras, guards, and other
25 security measures. *Id.* ¶¶ 33-37; Janosko Decl. ¶ 22.

26 Waymo uses Subversion (SVN) — a revision control system — to store its electrical
27 design information. All traffic (both ingress to and egress from) the SVN repository is encrypted.
28 All traffic is authenticated against a list of authorized users before access to the repository is

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1 granted, and users do not share credentials — all accesses are unique to specific users. Access
 2 control lists are audited monthly and stale users are aggressively purged. The SVN server is
 3 password protected and accessible through specialized software. *Id.* ¶¶ 23-25. Additionally,
 4 Waymo imposes network security measures and access policies that restrict the access and
 5 dissemination of certain confidential and proprietary trade secret information to only teams that
 6 are working on projects related to that information. For example, Google employees working on
 7 projects with no relation to Waymo or self-driving cars could not (and cannot) access Waymo’s
 8 confidential and proprietary schematics. They are distributed on a “need to know” basis. Droz
 9 Decl. ¶ 32. Google’s networks generally are also secured through Network Access Control
 10 (“NAC”) procedures, Access Control Lists (“ACLs”), and restricted access privileges. Janosko
 11 Decl. ¶¶ 13-16.

12 Google employs a variety of security mechanisms to prevent network intruders or attackers
 13 who may compromise Waymo’s trade secret information. Google also secures employees’ devices
 14 and credentials against attacks through monitoring and logging practices, as well as regular
 15 security updates. *Id.* ¶¶ 7-12, 20.

16 Google secures its production infrastructure in progressive layers starting from the physical
 17 security of data centers, continuing on to the security of the hardware and software that underlie
 18 the infrastructure, and finally, the technical constraints and processes in place to support
 19 operational security. Google employs many hundreds of engineers dedicated to security and
 20 privacy distributed across all of Google, including many who are recognized industry authorities.
 21 These engineers work to protect Google’s production servers from malware utilizing tools such as
 22 binary verification. Google also has an incident management process for security events that may
 23 affect the confidentiality, integrity, or availability of systems or data *Id.* ¶¶ 17-21.

24 Waymo incorporates by reference its Response to Interrogatory No. 7 and all supplements
 25 thereto.

26 *Competitive relationship between Waymo and Uber* – Waymo recognizes that Uber is [REDACTED]
 27 [REDACTED] (WAYMO-UBER-
 28 00004175-194 at ‘184-185) Similarly, Uber recognizes Waymo is a significant competitor. In

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1 fact, as discussed above, Uber has described Waymo as an existential threat to its TAAS business:

2 [REDACTED]
 3 [REDACTED] (UBER00070108-110 at ‘108.) Internal Uber documents indicate that Uber

4 believes [REDACTED]
 5 [REDACTED]
 6 [REDACTED]
 7 [REDACTED]
 8 [REDACTED]
 9 [REDACTED]

10 [REDACTED] UBER00070108-110 at ‘108.)

11 *Development cost savings to Uber* – As discussed in more detail above, Uber has likely
 12 realized significant cost savings in terms of its development timeline. While considering the
 13 acquisition of Otto, Uber recognized [REDACTED]

14 [REDACTED] (UBER00068983) An Uber email
 15 estimates that Uber’s acquisition of Otto [REDACTED]
 16 [REDACTED]

17 [REDACTED] (UBER00060147-
 18 156 at ‘147.) One way to measure the costs that Defendants saved through their misappropriation
 19 of Waymo’s trade secrets is by looking at the costs that Waymo incurred to develop those trade
 20 secrets. As discussed in Waymo’s response to interrogatory 6, Waymo has incurred up to [REDACTED]
 21 [REDACTED] to develop the trade secrets. (See Waymo’s 7/13 Supplemental Response to Interrogatory
 22 No. 6 and all supplements thereto.)

23 *Increased future expected profits to Uber* – As discussed above in the unjust enrichment
 24 section, Uber expected that acquiring Ottomotto and Otto Trucking [REDACTED]
 25 [REDACTED]
 26 [REDACTED]

27 (UBER00069030-033 at ‘033.)
 28

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1 *LiDAR system cost savings* – Waymo has obtained significant cost savings by developing
 2 custom, in-house LiDAR systems using its trade secrets, and Waymo expects that by
 3 misappropriating Waymo’s trade secrets, Uber will be able to obtain similar results. Waymo’s
 4 custom, in-house solution is much cheaper than options offered by third party vendors; as
 5 explained in more detail above and in Waymo’s response to Interrogatory No. 6, a mid-range
 6 LiDAR from Velodyne costs approximately \$70,000. By contrast, the materials needed for
 7 Waymo’s own mid-range GBr3 LiDAR system, which uses the trade secrets at issue in this case,
 8 cost just over [REDACTED] (See Waymo’s Response to Interrogatory No. 6 and all supplements
 9 thereto.) [REDACTED]
 10 [REDACTED] (UBER00086529.)

11 Due to the misappropriation of Waymo’s trade secrets, Defendants will likely benefit from
 12 many years of future cost savings due to employing Waymo’s trade secrets in Uber’s LiDAR
 13 systems. While considering the acquisition of Otto, [REDACTED]

14 [REDACTED]
 15 [REDACTED] (UBER00068983.) [REDACTED]
 16 [REDACTED]
 17 [REDACTED]
 18 [REDACTED]
 19 [REDACTED]
 20 [REDACTED]

21 In addition, if Uber is able to deploy autonomous vehicles in its fleet, its operational costs
 22 for its ridesharing business would likely drop substantially, in part because it would not have to
 23 share any revenue with its drivers.

24 *Valuation of Uber’s acquisition* – As discussed above, Waymo is still obtaining discovery
 25 regarding Uber’s internal valuation of Otto. However, Nina Qi testified that [REDACTED]
 26 [REDACTED] (Qi Tr. at 100-103.)

27 *Punitive Damages, Attorneys Costs and Fees* -- Defendants’ trade secret misappropriation
 28 has been willful and malicious. If willful and malicious trade secret misappropriation exists, both

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1 CUTSA and DTSA allow punitive damages up to two times any damages award. *See* Cal. Civil
2 Code Section § 3426.3 *and* 18 U.S.C. § 1836(b)(3)(C). If willful and malicious misappropriation
3 exists, CUTSA and DTSA also allow recovery of attorneys’ fees and costs. *See* § 3426.4 *and* 18
4 U.S.C. § 1836(b)(3)(D). In addition to attorneys’ fees, Waymo is also eligible to receive
5 reasonable expert fees under CUTSA. § 3426.4.

6 While discovery is not complete and Waymo has still not seen the Stroz due diligence
7 report (which Waymo expects will bear on this issue), the evidence to date indicates that Uber and
8 Anthony Levandowski were in league with one another to port Waymo’s trade secrets to Uber
9 going as far back as May 2015. (Dkt. 712, Ex. 1 (logging discussions between Uber and Mr.
10 Levandowski beginning on May 20, 2015 “wherein Anthony Levandowski mentioned LiDAR to
11 any officer, director, employee, agent, supplier, or consultant of defendants”).) Uber continued to
12 meet with Mr. Levandowski throughout the fall of 2015. (Dkt. 712, Ex. 1 (logging five meetings
13 with Mr. Levandowski regarding LiDAR between October 2015 and December 11, 2015).) Uber
14 met with Mr. Levandowski to discuss LiDAR on the very same day that he downloaded 14,000
15 proprietary files from Waymo servers, (Dkt. 712 Ex. 1; Dkt. 23, ¶ 44), and again a few weeks later
16 on the same day Mr. Levandowski downloaded additional proprietary information from Waymo.
17 (Ex. 263; Dkt. 24-2 ¶ 22.)

18 When Uber began meeting with Otto, Otto did not have any products. (Qi Tr. 146:8-18.)
19 Instead, Uber acquired Mr. Levandowski’s company because of its [REDACTED]

20 [REDACTED]:

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED]

25 [REDACTED]

26 [REDACTED]

27 [REDACTED]

28 [REDACTED]

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1 (Ex. 271 at 1.) While Mr. Bares refers to the “[REDACTED]” that Mr. Levandowski was going to bring to
 2 his new company, there was no team in place other than Mr. Levandowski and Mr. Ron at the time
 3 of this email.

4 Given Uber’s scheme to buy Waymo’s “[REDACTED]” and “[REDACTED]” through Mr. Levandowski,
 5 Uber began anticipating litigation with Waymo almost immediately. The day after Mr.
 6 Levandowski resigned from Waymo, Uber was already discussing “[REDACTED]” with Mr.
 7 Levandowski and Lior Ron. (Ex. 277, January 28, 2016 email from Cameron Poetzsch asking
 8 Travis Kalanick, “[REDACTED]”

9 “[REDACTED]”) By “[REDACTED]”, the parties were
 10 specifically discussing “[REDACTED]” including “[REDACTED]”
 11 (UBER00017265 at -73, Email between Uber representatives and Lior Ron discussing “[REDACTED]”
 12 “[REDACTED]” and an “[REDACTED]” which included
 13 “[REDACTED]”)

14 Having agreed to “[REDACTED]” Mr. Levandowski for “[REDACTED]”,
 15 Uber then set up a forensic due diligence investigation designed specifically to uncover – or
 16 confirm – the downloaded Waymo files in Otto’s or Mr. Levandowski’s possession. The
 17 existence and sheer scope of this investigation is proof enough that Uber knew Mr. Levandowski
 18 had Waymo materials: it was, and remains, a process that was unprecedented for Uber.
 19 (Poetzsch Tr. at 128:11-25; Qi Rough Tr. at 243:17-244:3.) As part of the investigation, Stroz
 20 took and analyzed the electronic devices of five different Otto employees, including both their
 21 personal and work devices. (See Ron Tr. at 96:3-19.) Despite this, the Uber witnesses responsible
 22 for overseeing the investigation testified that the diligenced employees did not seem upset by the
 23 scope of the investigation that Uber requested; instead, “[REDACTED]” (Qi Rough Tr. at
 24 223:22-224:6.) The most likely explanation for that is, of course, that all parties already knew
 25 what Uber was looking for—stolen Waymo files.

26 Although Uber must have known about the downloaded files when it agreed to indemnify
 27 Mr. Levandowski and set up the forensic investigation, Uber almost certainly found out that Mr.
 28 Mr. Levandowski had downloaded materials when the diligence process got underway. To

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1 motivate Mr. Levandowski to disclose *all* of his “Bad Acts” to Stroz, Uber created an elaborate
2 incentive structure: as long as Mr. Levandowski disclosed his “Bad Acts” (including
3 [REDACTED]) to Stroz, Uber would indemnify him. (UBER00017265 at -
4 73-74; Dkt. 566 at 3.) If Mr. Levandowski did not disclose “Bad Acts” to Stroz, Levandowski
5 could not seek indemnification from Uber for those “Bad Acts” later. (*Id.*) Although Waymo has
6 still not seen the due diligence report that Stroz produced, all evidence indicates that Mr.
7 Levandowski accepted this offer and disclosed the existence of the stolen information to Uber and
8 Stroz. Defendants have never disputed that Stroz has some of the stolen information in its
9 possession as a result of the due diligence process, and Uber recently admitted that its lawyers
10 have also possessed the stolen information for over a year by virtue of their involvement in the due
11 diligence process. (Dkt. 677-8.)

12 *At the very latest*, Uber learned that Mr. Levandowski had downloaded Waymo materials
13 in his possession on March 11, 2016 when Mr. Levandowski told Uber outright. As Uber has
14 explained: “On or about March 11, 2016, Mr. Levandowski reported to [Travis] Kalanick, Nina Qi
15 and Cameron Poetzsch at Uber as well as Lior Ron that he had identified five discs in his
16 possession containing Google information.” (Dkt. 695 at 4.) Uber’s accounting indicates that Mr.
17 Levandowski and Mr. Kalanick had a meeting to discuss LIDAR on the same day. (Dkt. 712, Ex.
18 1 at No. 63.) Since receiving this interrogatory response, Waymo has deposed three of the four
19 individuals to whom Mr. Levandowski made this admission, and all three confirmed that Mr.
20 Levandowski did indeed reveal that he had Google “stuff” in his possession during an in-person
21 meeting with Uber on March 11, 2016. (Ron Tr., 25:23-26:18; Poetzsch Tr., 249:3-250:9; Qi
22 Rough Tr., 271:11-273:20.) Uber now insists that Mr. Levandowski subsequently destroyed the
23 materials (raising other serious concerns, including concerns regarding the integrity of Stroz’s
24 investigation), but the point remains: Uber was aware of Mr. Levandowski taking confidential
25 Waymo information files as of March 11, 2016, and Uber acquired Mr. Levandowski’s company
26 anyway. And even after finding out that he had Waymo materials in his possession on March 11,
27 2016, Uber *never* took *any* steps to prohibit Mr. Levandowski from using his “treasure trove of
28 files” in his work at Uber.

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Waymo also seeks prejudgment interest on the damages awarded for the misappropriation of trade secrets at the California statutory prejudgment interest rate of seven percent (7%).

Damages for Infringement of U.S. Patent No. 9,368,936

With respect to Defendants’ infringement of U.S. Patent No. 9,368,936 (the “’936 Patent”), Waymo claims damages “adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the inventions by the infringer, together with interest and costs as fixed by the court,” pursuant to the provisions of 35 U.S.C. § 284. Waymo seeks reasonable royalty damages to compensate it for Defendants’ infringement of the ’936 patent. Waymo is not seeking lost profit damages.

Waymo’s damages expert will analyze and compute the amount of damages Waymo has suffered as a result of Defendants’ infringement, based on the documents and information produced by Waymo, Defendants and third parties during discovery, as well as independent research conducted by the damages expert. Specifically, Waymo’s expert will, among other things, opine as to the appropriate reasonable royalty, either in the form of a lump sum payment or a running royalty rate, or a combination of both.

As discussed above, Defendants have not yet responded to Waymo’s damages-related discovery requests. Therefore, Waymo’s expert has not concluded his analysis and is not expected to do so until the time that expert reports are due on August 24, 2017.

The ’936 Patent is titled, “Laser Diode Firing System” and names Samuel W. Lenius and Pierre-Yves Droz as inventors. The patent was filed on December 18, 2013, and claims priority to U.S. Provisional Application No. 61/884,762, filed September 30, 2013. The patent issued on June 14, 2016.

The ’936 Patent discloses an improved firing system for laser diodes that are at the heart of a LiDAR system. The laser diodes are used to generate pulses of light that are transmitted through the optical components of the LiDAR system (*e.g.*, lenses and mirrors) and out into the surrounding environment. The light pulses reflect off of objects in the environment and return to the LiDAR system through its main lens and into a series of photodetectors. The system measures the time delay between the emitted pulse and detected pulse in order to determine the distance

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1 between the LiDAR device and the reflecting object. The laser diodes can be rapidly and
2 repeatedly fired to collect distance information across a large surrounding environment. The
3 system is able to combine the measured distances and orientations of each laser pulse in order to
4 generate a three-dimensional map of the surrounding environment. The three-dimensional map
5 allows the system to make navigation decisions, such as whether to stop or turn to avoid an
6 upcoming object.

7 In order for the LiDAR system to detect objects accurately, it is critical that the timing of
8 the laser pulses is fast and reliable. Emitting the laser pulses quickly allows for more detection
9 points over a given period of time, and therefore a more accurate map of the surrounding
10 environment. Emitting the laser pulses at the right time ensures that the round-trip time from
11 emission to detection accurately represents the distance to the detected object.

12 Laser diodes are light-emitting semiconductor devices that work on the principle of a p-n
13 junction. A p-n junction is formed by doping a semiconductor material so that it has a “p-type”
14 layer joined with an “n-type” layer. The p-type material is characterized by a relatively lower
15 concentration of electrons and a higher concentration “holes” (a term used to refer to the absence
16 of an electron). The n-type material is characterized by a relatively higher concentration of
17 electrons and a lower concentration of holes. When a voltage is applied across the p-n junction
18 and a current flows through the diode, electrons from the n-type travel into an active region
19 between the two layers and “recombine” with holes from the p-type layer. The recombination
20 emits energy, and depending on the type of semiconductor material, the energy can be heat, or
21 light in the form of photons. In laser diodes, the material and physical design of the
22 semiconductor material is selected to emit a monochromatic, phase-coherent beam of photons
23 which can be pulsed.

24 In order to generate a voltage pulse across the p-n junction of the laser diode, a firing
25 circuit is used. The firing circuit includes a voltage source and other electronic components that
26 work together to supply a pulsed current to the laser diode, causing it to emit a pulse of light. The
27 inventions claimed in the '936 Patent relate to an improved firing circuit that quickly and reliably
28 provides a voltage across a laser diode in a LiDAR system to generate the light pulses needed for

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1 detection. As discussed in more detail below, the firing circuit uses a single transistor to control
2 the circuit’s charge cycle and emission cycle. This allows the circuit to begin charging as soon as
3 the laser diode stops emitting light. There is no lag between the end of the emission cycle and the
4 beginning of the charge cycle. As a result, the circuit is recharged and ready to fire more quickly,
5 and more light pulses can be emitted over a given time interval. More light pulses mean more data
6 points, and therefore a more accurate mapping of the surrounding environment. For the vehicle to
7 be safe and reliable, it must accurately map its surrounding environment, and to that end, it must
8 quickly and reliably generate the laser pulses used to collect data about the environment.

9 At present, Waymo anticipates that its expert’s computations of a reasonable royalty
10 adequate to compensate for Defendants’ infringement will involve an analytical approach and/or a
11 hypothetical negotiation approach. An analytical approach is used to determine a royalty that
12 leaves the infringer with a “normal” rate of return for the use of its infringing products or calculate
13 a royalty based on the increased profitability due to the use of the infringing feature. In other
14 words, such methods will determine, or isolate, the financial benefit or value to Defendants for
15 their current and future infringing use of the patented technology claimed in the ’936 Patent.
16 While Waymo has seen evidence of Defendants’ infringement in connection with their inspections
17 of Defendants’ premises, Waymo is still seeking evidence regarding how many infringing devices
18 Defendants have produced or plan to produce in the future. Waymo anticipates that its expert’s
19 determination of reasonable royalty damages under an analytical approach or hypothetical
20 negotiation approach will be based on, among other things, analysis of future sales
21 data/summaries, projections, analyst forecasts, profitability information and other documents and
22 records produced by Defendants and other third parties. In addition to the foregoing, Waymo’s
23 expert may utilize documents and materials referred to and recognized as relevant to the
24 determination of the cost savings achieved by the Defendants due to their infringement.

25 The evidence discussed above in the discussion of damages for Defendants’
26 misappropriation of trade secrets would be relevant to both the hypothetical negotiation approach
27 and the reasonable royalty approach, and Waymo incorporates that evidence by reference into this
28 discussion of damages for infringement of the ’936 Patent.

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1 If Waymo’s expert determines reasonable royalty damages under a hypothetical
2 negotiation approach, Waymo’s expert may also utilize documents and materials referred to and
3 recognized as relevant to the determination of a reasonable royalty or other damages computations
4 in cases such as *Georgia-Pacific*, among others, such as:

5 1. The royalties received by the patentee for the licensing of the patent in suit, proving or
6 tending to prove an established royalty.

7 2. The rates paid by the licensee for the use of other patents comparable to the patent in
8 suit.

9 3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or
10 non-restricted in terms of territory or with respect to whom the manufactured product may be sold.

11 4. The licensor's established policy and marketing program to maintain his patent
12 monopoly by not licensing others to use the invention or by granting licenses under special
13 conditions designed to preserve that monopoly.

14 5. The commercial relationship between the licensor and licensee, such as, whether they
15 are competitors in the same territory in the same line of business; or whether they are inventor and
16 promoter.

17 6. The effect of selling the patented specialty in promoting sales of other products of the
18 licensee; the existing value of the invention to the licensor as a generator of sales of his
19 nonpatented items; and the extent of such derivative or convoyed sales.

20 7. The duration of the patent and the term of the license.

21 8. The established profitability of the product made under the patent; its commercial
22 success; and its current popularity.

23 9. The utility and advantages of the patent property over the old modes or devices, if any,
24 that had been used for working out similar results.

25 10. The nature of the patented invention; the character of the commercial embodiment of it
26 as owned and produced by the licensor; and the benefits to those who have used the invention.

27 11. The extent to which the infringer has made use of the invention; and any evidence
28 probative of the value of that use.

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1 12. The portion of the profit or of the selling price that may be customary in the particular
2 business or in comparable businesses to allow for the use of the invention or analogous inventions.

3 13. The portion of the realizable profit that should be credited to the invention as
4 distinguished from non-patented elements, the manufacturing process, business risks, or
5 significant features or improvements added by the infringer.

6 14. The opinion testimony of qualified experts.

7 15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer)
8 would have agreed upon (at the time the infringement began) if both had been reasonably and
9 voluntarily trying to reach an agreement; that is, the amount which a prudent licensee -- who
10 desired, as a business proposition, to obtain a license to manufacture and sell a particular article
11 embodying the patented invention -- would have been willing to pay as a royalty and yet be able to
12 make a reasonable profit and which amount would have been acceptable by a prudent patentee
13 who was willing to grant a license.

14 *Georgia-Pacific Factors 1-4.* At this time, Waymo is not aware of any license agreements
15 that would demonstrate an established royalty rate for the '936 Patent, and it is not presently aware
16 of any license agreements that are technologically and economically comparable for purposes of
17 the hypothetical negotiation.

18 *Georgia-Pacific Factor 5.* As discussed above, Waymo recognizes that Uber is [REDACTED]
19 [REDACTED] (WAYMO-UBER-
20 00004175-194 at '184-185) Similarly, Uber recognizes Waymo is a significant competitor. In
21 fact, as discussed above, Uber has described Waymo as an existential threat to its TAAS business:

22 [REDACTED]
23 [REDACTED] (UBER00070108-110 at '108.) Internal Uber documents indicate that Uber
24 believes [REDACTED]

25 [REDACTED]
26 [REDACTED]
27 [REDACTED]
28 [REDACTED]

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[REDACTED]

[REDACTED] (UBER00070108-110 at ‘108.)

Georgia-Pacific Factors 6, 8-10, 12-13. As discussed above, the ‘936 Patent has a number of advantages over old modes or devices, and would help accelerate a licensee’s autonomous vehicle technology more generally, reduce costs, and promote sales of products incorporating non-patented items as well. Waymo uses a commercial embodiment of the ‘936 Patent in its own autonomous vehicles.

Georgia-Pacific Factor 7. As discussed above, the ‘936 Patent issued on June 14, 2016. Based on existing discovery, Waymo believes that Uber’s infringement began as early as November 2016. The ‘936 Patent expires in July 2033, which is the potential duration of the term of any license resulting from a hypothetical negotiation.

Georgia-Pacific Factor 11. Waymo incorporates by reference its Statement of Waymo Attorney Charles Verhoeven in Response to Court Order (Dkt. 784) Regarding Patent Claims, as well as its Infringement Contentions, which set forth evidence regarding the extent to which Uber has made use of the invention and evidence probative of the value of that use. (*See also* UBER00075463-74.)

Waymo also seeks prejudgment interest for its patent damages, calculated at least at the prime rate of interest prevailing over the period during which damages are awarded.

Discovery is ongoing and Waymo reserves the right to supplement this response in light of new information that it discovers and new arguments from Defendants.

INTERROGATORY NO. 14:

Identify all Persons at Waymo who had Communications with Anthony Levandowski relating to the Project Chauffeur bonus program, including but not limited to Communications regarding the timing of payments to be made to Anthony Levandowski under that bonus program.

HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY

RESPONSE TO INTERROGATORY NO. 14:

Waymo incorporates by reference its General Objections. Waymo further objects to this interrogatory on the grounds that it is overbroad, unduly burdensome, and oppressive, including to the extent that it asks Waymo to “[i]dentify all Persons.”

Subject to and without waiving the foregoing General and Specific Objections, Waymo responds as follows:

Waymo identifies the following individuals at Waymo as having had communications with Anthony Levandowski relating to the Project Chauffeur bonus program: Chelsea Bailey, Jolie Sorge, Chris Urmson, Sebastian Thrun, and David Lawee.

Discovery is ongoing and Waymo reserves the right to supplement these responses in light of new information that it discovers.

DATED: July 21, 2017

QUINN EMANUEL URQUHART & SULLIVAN,
LLP

By /s/ Charles K. Verhoeven

Charles K. Verhoeven
Attorneys for WAYMO LLC